

By Jeffrey Mirel

or at least a half century, education reformers have quipped that 120th Street in New York City, the street that separates Teachers College from the rest of Columbia University, "is the widest street in the world." Underlying this quip is the belief that Columbia's liberal arts faculty members regularly dismiss the child-centered educational methods promoted by their colleagues at Teachers College as at best misguided and at worst anti-intellectual. In turn, professors at Teachers College routinely denounce their liberal arts colleagues as musty traditionalists who fail to recognize that most elementary and secondary students in American schools find discipline-based education useless and irrelevant to their lives.²

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As cartoon-like as this portrait is, it contains more than a kernel of truth. Since the creation of public schools in the early 19th century, people have been debating questions about the relative importance of subject matter and pedagogical methods in teacher training programs.³ Yet because of the highly decentralized nature of 19th- and early 20th-century American public education, these debates were essentially moot. Each school district was a largely independent governing body, and school board members in the vast number of rural districts across the land hired whomever they pleased, often regardless of a teacher's preparation (or lack thereof).

This situation began to change dramatically in the first half of the 20th century. Schools and colleges of education became an integral part of American universities, and state-created "normal schools" (charged specifically with preparing teachers) became colleges in their own right. In both cases, these institutional changes seemed to offer the prospect of uniting specialists in subject matter and pedagogical methods. Instead, these groups sought to establish their separate areas of expertise and thus

wound up widening the gap between them. Indeed, for most of the 20th century, dialogues between "ed school" faculty members and their liberal arts colleagues about how to train prospective teachers in such fields as English, history, mathematics, and science were scarce, with neither side respecting the expertise of the other. With few exceptions, this lack of dialogue and collaboration in teacher training continues to the present day. It is arguably one of the most important factors contributing to the poor quality of teacher education in this country.

parting of the ways between education and liberal arts faculty members was not inevitable. In fact, in the late 19th century, a different model emerged at the University of Michigan (U-M), in which liberal arts faculty members and the professors dedicated to the "art and science of pedagogy" worked together on teacher education. This unified approach to teacher education took root after a significant change in admissions procedures that U-M introduced in the late 19th century. At the time, virtually every college and university in the country admitted students on the basis of examinations, which differed from institution to institution. In 1870, U-M shifted from using examinations for admissions to requiring simply that prospective students graduate from "accredited" high schools. In this system, the accrediting agents were U-M faculty members and, as a consequence, liberal arts professors regularly visited high schools across the state (and eventually across the country), determining whether schools were teaching students well enough for them to be worthy of U-M admission.5

Known as the Michigan Diploma Plan, this approach to college and university admissions had two main effects on teacher education at U-M. First, U-M liberal arts faculty members broadened their intellectual horizons to assess not just whether the high school teachers they were assessing as part of the accreditation process knew the academic content they were teaching, but also whether they appeared to be knowledgeable and effective teachers. In other words, they paid attention to both subject matter and teaching methods. Second, the more these faculty members visited high schools, the more they realized that U-M students who became high school teachers needed training in how to teach. Consequently, in 1879, Michigan became the first university in the country to create a permanent chair in pedagogy, which was housed in the College of Literature, Science, and the Arts. Over the next two decades, the faculty members serving as the education chair worked closely with their colleagues in the College of Literature, Science, and the Arts to introduce U-M students to the "science and art of teaching." In other words, they helped students become better teachers in their subject areas.⁶ As William Payne, the first education chair, put it, "Successful teaching involves two elements—[subject] matter and methods." He believed that these two aspects of good teaching were deeply intertwined and neither should be neglected.7

Unfortunately, early in the 20th century, this approach to teacher education at Michigan ended.8 As liberal arts faculty members increasingly sought to develop their own fields of inquiry, few of them wanted to spend time visiting and accrediting high schools. To address this problem, in 1899, the university hired another education faculty member to take over the accreditation program. While some liberal arts professors continued to visit high schools, this redesign of the accreditation process was the first step toward dividing subject matter from methods at U-M. As the number of "educationists" at U-M grew, the university created a Department of Education within the College of Literature, Science, and the Arts. Faculty members of this new department increasingly focused their teaching and research on such nonliberal arts fields as educational administration and school finance. In 1921, the department left the College of Literature, Science, and the Arts and became the School of Education. With this move, faculty members in the liberal arts and their colleagues in the School of Education were literally and intellectually separated. The once-collaborative approach to teacher education vanished.9

Over the years, no one referred to South University Avenue, the street that separates the School of Education from Michigan's

For most of the 20th century, dialogues between "ed school" faculty members and their liberal arts colleagues about how to train prospective teachers were scarce.

liberal arts college, as the "widest street in the world," but the gap between education specialists and disciplinary specialists in Ann Arbor became as broad and deep as at any university in the country. While the circumstances that led to this disconnect at Michigan were unique, the trend they represented was widespread. Indeed, the rise of schools and colleges of education and the growing indifference of liberal arts faculty to teacher training ensured that this gap would go unbridged for decades to come.¹⁰

Two other developments pertaining to the rise of schools and colleges of education made matters worse. First, between 1920 and 1950, state governments increasingly made schools and colleges of education the main institutions legally permitted to train prospective teachers for certification. 11 With this development, the center of gravity in teacher training moved almost completely to education faculty members whose areas of expertise were in such fields as educational administration, elementary and secondary school teaching methods, educational measurement (i.e., testing), and educational psychology. While prospective high school teachers still had to take liberal arts courses in areas such as English, history, mathematics, and the sciences to meet state certification standards, the certification bar often was quite low. 12 In addition, increasing numbers of prospective elementary school teachers took many if not most of their courses in schools and colleges of education, leaving them with modest exposure to traditional liberal arts courses.

This trend relates directly to the second development that undermined the quality of teacher education—the diminished weight given to liberal arts knowledge in teacher training curricula. Beginning in the 1920s and continuing to the present day, many faculty members in schools and colleges of education adopted ideas rooted in progressive education that paid considerably less attention to curricula based in the liberal arts. ¹³

Emerging in the late 19th and early 20th centuries, ideas developed by reformers known as progressive educators provided what was then a much-needed critique of the conditions and practices in public schools across the United States. At the time, most public schools (in big cities and rural areas) were overcrowded, most instruction was teacher centered, and, for the most part, the pupil's role was passive. Teachers taught curricula that were unrelated to the lives of children, focused on having students memorize rather than understand texts, and kept students in line using corporal punishment.¹⁴

Progressive educators sought to correct all these ills, but they were particularly concerned about the nature and content of school curricula, which they denounced as little more than col-

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lections of random facts (e.g., a list of the major rivers of South America). Worse, progressive critics argued, teachers typically presented the facts without any sense of context or even a reason why such information might be useful.

John Dewey, long regarded as the "father" of progressive education, focused on this problem in his classic 1902 essay "The Child and the Curriculum." He argued that changing the nature of curricula was central to improving the quality of teaching and, by implication, teacher education. Dewey was emphatic that pupils *should* learn discipline-based content, but he urged educators to recognize that, for the most part, such content was structured around questions and research that were meaningful to experts in various academic disciplines, not to children. As he explained, "Textbook and teacher vie with each other in presenting to the child the subject-matter as it stands to the specialist.... The material is not translated into life-terms." By lamenting the lack of "life-terms," Dewey was arguing for discipline-based curricula to be reframed in ways that connected "with what the child has already seen and felt and loved." 15

Dewey declared that this should not be a process of either dumbing down or sweetening up such content to make it easier for students to memorize facts. Rather, he argued, reframing the content should enable educators to view traditional curricula as a vast storehouse of answers to problems that people in the past have solved. From that perspective, educators' primary task was to create engaging problems for students to solve, problems that would compel them to seek answers in discipline-based knowl-

edge. As Dewey put it, discipline-based subject matter "must be restored to the experience from which it has been abstracted." ¹⁶ For example, in a Deweyan school, students might learn about the Pythagorean theorem when dealing with a real-life problem like building a shed that requires right angles on the corners, rather than just memorizing an abstract mathematical formula.

ewey's connection of discipline-based subject matter and pedagogy was brilliant and revolutionary. It offered professors in schools and colleges of education a marvelous opportunity to reach out to their colleagues in the liberal arts to work together in reshaping curricula and teacher education along Deweyan lines. Sadly, this is not what happened. Over the next century, Dewey was badly misunderstood. He became a sort of patron saint for teacher educators who wanted to make classrooms more student centered and active, and to make the curriculum more relevant to students' daily lives. But few teacher educators were as committed as Dewey to making the liberal arts an essential part of this "new education." Many of them took Dewey's critique of the formal and abstract nature of disciplinary knowledge as reason enough to avoid stressing such knowledge—especially at the elementary level. Consequently, beginning in the 1930s, some education school faculty members sought to create their own curricula for elementary schools, curricula that were long on relevance and interest, but short on discipline-based knowledge and information.¹⁷ Far too many of these curricula engaged children, but did not prepare them for more advanced studies. Compounding this problem, few liberal arts professors saw improving teacher education, especially on the elementary level, as something worth their time and effort. In short, no one seemed to realize the importance of early education in laying a strong foundation for future studies and for life. And so, as the 20th century wore on, the gap between discipline-based content and pedagogy widened.

Nowhere were these trends clearer than in the development of social studies education. In the late 19th and early 20th centuries, history, geography, and civics were important parts of most elementary schools' curricula. For example, in cities such as Chicago, Cleveland, and Detroit, the prescribed program of studies in the elementary grades regularly included biographies of historical figures like Columbus, Washington, and Lincoln; folktales or fables; units on geography (local, national, and foreign, depending on the grade level); and elements of civics, such as knowledge of the separation of powers in the Constitution. ¹⁸

While there is not a great deal of evidence about how well these subjects were taught or how much of this material pupils retained, many child-centered progressive educators rejected these subject-centered approaches as merely simplified versions of the austere and distant disciplines that Dewey had criticized. Believing they were holding true to Dewey's vision, child-centered progressive educators in the 1920s and 1930s sought to create more relevant and interesting course materials that they argued "unified" history, geography, and civics into a new and exciting approach they referred to as social studies. Perhaps the most important educationist associated with this effort was Paul R. Hanna, who was educated at Teachers College

and who spent three decades as a professor in the School of Education at Stanford. During these years, he became one of the leading social studies educators both in the United States and internationally.19

In the 1930s, Hanna argued that elementary schools needed a social studies curriculum that would be much more interesting and relevant for children than the traditional history, geography, and civics approach of the past.²⁰ Believing that he was enacting Dewey's ideas, Hanna sought to create a curriculum centering on "human relations," which he believed were basic human activities (e.g., producing goods and services, communication and transportation, and recreation) that would resonate with elementary children. Echoing Dewey, he stated, "Human relations are those unitary life experiences that the specialists have broken up and classified into such subject-matter fields as history, geography, civics, economics, sociology, political science, ethics, esthetics, anthropology, [and] individual and social psychology."21 But when Hanna got down to the specifics about what his "human relations" curriculum was about, the links between it and disciplinary knowledge—links that were central to a true Deweyan approach—were tenuous at best.

Defining interest and relevance as relating to the immediate experiences of children, Hanna developed what became known as the "expanding environments" or "expanding communities" approach. This innovation essentially scrapped the earlier discipline-based social studies curriculum and replaced it with a series of lessons that in the first grade focused on "home and school life." He then had children move outward to "community life" in second grade, considered how people adapted to different forces of nature in third grade, and so forth. Hanna believed that these topics were far more interesting for elementary pupils

than stories about, for example, young Ben Franklin. Indeed, this approach questioned the usefulness of history altogether, because it was not part of children's immediate experience.²² This is not to say that traditional history, geography, and civics disappeared from elementary schools, but they increasingly gave way to lessons based on such topics as what it means to live in a social group.23

Refining his ideas in the late 1930s and 1940s, Hanna published a series of enormously popular social studies textbooks that promoted the "expanding environments" approach in simple, colorful, readable formats. They were among the most widely used, if not the most widely used texts in elementary social studies in the country.24

The popularity of these texts was due to more than just their accessible format for children. Another factor was that elementary school teachers needed only a very modest amount of knowledge about history, geography, civics, or the social sciences to use these

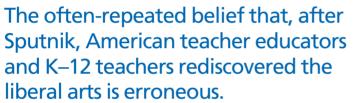
When one of the leading social studies educators got down to specifics, the links between his curriculum and disciplinary knowledge—links that were central to a true Deweyan approach—were tenuous at best.

books. Hanna was quite honest about why he structured his approach to social studies this way. Writing in 1934, he stated, "I struggled for a long time to get some kind of structure that did not represent merely the traditional categories of economics,

> political science, sociology, anthropology, history, and geography, because these would scare most teachers not having had anything in these fields [emphasis added]."25 Whether such subjects really would have "scared" elementary teachers (or prospective teachers) is anybody's guess. But Hanna certainly assumed that elementary teachers were unprepared to go beyond the simple stories in his textbooks. Thus, rather than providing a foundation for pupils to expand their historical, sociological, or economic knowledge-what Dewey had hoped problem-based curricula would promote—these stories became ends in themselves.

ver the next half century, this problem worsened. As education and public policy professor David K. Cohen argues, the absence or weakness of state curricula and the decentralized nature of American school governance led schools and colleges to prepare prospective teachers "to teach no particular version of their subjects."26 Rather than encouraging teacher trainees to delve deeply into how to teach liberal arts subjects, teacher education programs taught their graduates "a generic sort of teacher education" that prepared them to teach "nothing in particular."* Given this situation, it is no surprise that many teachers eagerly embraced such easy-to-use (and relatively liberal arts-free) programs as Hanna's expanding communities.

This lack of interaction between teacher education and the liberal arts was a continuing source of concern and controversy. Throughout the second half of the 20th century, there were increasingly frequent and acrimonious debates about the quality of teacher education, with particular emphasis on the lack of disciplinary knowledge among most prospective and practicing teachers. For example, in the late 1940s and early 1950s, a number of critics such as Mortimer Smith and Arthur Bestor published widely discussed books deploring the discipline-adverse aspect of teacher education. ²⁷ As Smith explained, the "official philosophy" (i.e., child-centered pro-



gressive education) of most teacher training institutions at best ignored traditional subject matter and at worse disparaged it. Specifically, he declared, "Our teacher training colleges and the graduate schools of education in our universities are whole-heartedly devoted to methodology." Smith maintained that concerns about effectively teaching subject matter were simply outside the perspective of most schools and colleges of education.²⁸

In October 1957, the Soviet launch of Sputnik jarred educators and created a new opportunity for reconnecting the disciplines with pedagogy. Amid the panic about Sputnik, many social commentators and political leaders argued that the reason the Soviets were beating the United States in the "space race" was the poor quality of public schools. Responding to this criticism, and to the lure of federal money following the creation of the National Science Foundation and passage of the 1958 National Defense Education Act (NDEA), a number of professors from the liberal arts and social sciences entered the field of school reform. Almost all of their reform efforts stressed the importance of disciplinary knowledge in improving teacher education and classroom practice. By far the most famous of these initiatives was "Man: A Course of Study" (MACOS), an interdisciplinary curriculum created in the mid-1960s by Jerome Bruner and an amazingly diverse group of educators. Drawing on the skills and knowledge of anthropologists, folklorists, linguists, and psychologists, to name just a few of the backgrounds



of the people involved in the project, MACOS promised to transform late elementary social studies (fourth or fifth grade) by getting children to address the question, "What is human about human beings?" Using films, storytelling, and other novel pedagogical approaches, MACOS educators got children engaged with disciplinary content, for example, learning about how such people as the Bushmen of the Kalahari and the Netsilik Eskimos adapted to challenging environments and developed rich, distinctive cultures.³⁰

Students and teachers responded enthusiastically to pilot versions of this curriculum, which seemed to offer a brilliant new approach to bridging subject matter and educational methods. Yet by the mid-1970s, MACOS had become a flashpoint of the emerging "culture wars." In 1970, for example, an evangelical minister in Lake City, Florida, denounced MACOS as "godless, humanistic, evolution-based, socialistic, and 'sensual in philosophy,'" claims that eventually impelled school district leaders to discontinue the program. Over the next few years, right-wing critics across the country made a concerted attack on MACOS, which essentially ended the use of the program entirely.³¹

hile the highly politicized battle over MACOS was unusual in the post-Sputnik reform era, the lack of influence that such initiatives had on teacher education, curriculum content, or pedagogical strategies, unfortunately, was typical. Indeed, by the late 1970s, few of the discipline-based reform programs were still in use. In other words, the often-repeated belief that, after Sputnik, American teacher educators and K–12 teachers rediscovered the liberal arts is erroneous. In fact, the impact of the post-Sputnik reforms on such indicators of student performance as high school course taking in math, science, and foreign languages (key areas of NDEA) was minimal. ³² Discipline-based reforms did not take hold for a variety of reasons, but two factors stand out. First,

given that teacher education largely focused on methods (not disciplinary content), many elementary teachers did not have the liberal arts knowledge necessary to teach new curricula. Second, many of these programs did not provide adequate resources for professional development to aid the teachers in implementing the new materials.³³ As these reform efforts scaled down in the 1970s, few scholars on either side of the subject matter/pedagogical divide were eager to try again.

Nevertheless, economic and political developments in the late 1970s and early 1980s created the conditions for another opportunity for revising teacher education, this time with some promising and seemingly enduring results. In 1983, the U.S. Department of Education published A Nation at Risk, a short, powerful, and widely discussed critique of public education. This manifesto inspired a range of education reforms. Regarding teacher education, the authors of A Nation at Risk echoed critics from the past, declaring, "The teacher preparation curriculum is weighted heavily with courses in 'educational methods' at the expense of courses in the subjects to be taught." The authors added, "A survey of 1,350 institutions training teachers indicated that 41 percent of the time of elementary school teacher candidates is spent in education courses, which reduces the amount of time available for subject matter courses."34 Implicit in such criticism was the question of whether schools and colleges of education were up to the job of preparing teachers for the challenges of the increasingly globalizing economy.

y far the most important response to this challenge came several years later when a small but influential group of scholars began researching the question, "What exactly do prospective and practicing teachers need to know?" Their answer was "pedagogical content knowledge" (PCK), an approach to teacher education that has gained momentum and influence to this day.35 Advocates of PCK then and now seek to better understand the components of effective teaching and, thus, to improve the quality of teacher education. Like most previous critics of teacher education, the supporters of PCK demand that prospective and practicing teachers including elementary teachers—have a strong background in the subjects they are going to teach. But they argue that such a background is not enough. In addition to subject-matter knowledge, scholars promoting PCK maintain that teachers also must find ways to communicate knowledge to others. Unlike prior initiatives to improve teacher education, this is not a call for simply better methods courses in schools of education. Rather, it blends content and pedagogy. As several prominent proponents of PCK explain, teachers "must have two types of subjectmatter knowledge: knowledge of the subject field, and knowledge of how to help their students come to understand the field."36 In many ways, these ideas draw from the work of Dewey as well as research done by cognitive scientists who became interested in schooling during the post-Sputnik era.

Yet PCK is unlike previous reform efforts in a number of important ways. Central to PCK is the belief that how teachers *represent* knowledge is a vital component of effective teaching. Representing knowledge is akin to what Dewey referred to as translating discipline-based knowledge into life-terms. As PCK advocates explain, effective teachers consistently seek better

ways to "represent" or "transform" subject matter to make it accessible to their students: "These representations or transformations of subject matter take many forms—metaphors, analogies, illustrations, examples, in-class activities, and homework assignments."³⁷

The beauty of paying attention to representing subject matter in this way is that representations can be researched, and those that are effective and efficient in increasing student learning can be taught to prospective and practicing teachers. In other words, PCK offers the possibility of changing the nature and content of schools and colleges of education by getting them to concentrate on reconnecting subject matter and pedagogy in ways that make a dramatic difference in how teachers teach.

Another striking difference between PCK initiatives and previous efforts to change teacher education is that the main proponents of PCK are largely faculty *within* schools and colleges of education. Many of them are among the most well-respected education researchers in the country.³⁸ Thus, they cannot be dis-

Pedagogical content knowledge, a growing approach to teacher education, demands that teachers have a strong background in their subjects and find ways to communicate knowledge to others.

missed as outsiders who do not understand the challenges of teacher education.

As exciting as PCK is, it could be much more powerful if teacher educators had a set K-12 curriculum as a foundation for their work. The heart of PCK is ensuring that teachers have mastered both the content they will teach and the best ways of teaching it. But without a common core curriculum, teacher educators interested in PCK must guess at what content teachers might teach and what representations are more effective in that teaching. Currently, with nothing more than vague standards to guide them, each school district is free to adopt or develop its own curriculum—or to ignore curriculum entirely (leaving it up to schools or individual teachers). As David K. Cohen has pointed out, this situation severely limits the effectiveness and efficiency of teacher preparation,39 especially since there is no way to predict which teacher candidate will end up in which district or school. Some prospective teachers may need to be prepared to teach a prescribed curriculum and/or pedagogy; others may need to be prepared to write their own curriculum. If the new effort to develop PCK is to flourish, it must be guided by a common core curriculum.

E. D. Hirsch, Jr., has been arguing for over two decades for a coherent, discipline-based core curriculum that all students must follow. By implication, such a core curriculum could lead directly to a transformation of teacher education.⁴⁰ Once teacher education.



tors know exactly what knowledge and skills prospective teachers will be required to teach in K-12 classrooms, they then can focus on instructing these prospective teachers in such approaches as PCK, approaches that would improve instruction and learning.

or more than a century, teacher educators and their colleagues in the liberal arts have failed to collaborate in linking two of the most vital aspects of the instructional experience—subject matter and pedagogy. Today, however, with the movement toward a common core curriculum and the growing influence of PCK in schools and colleges of education, we have before us a new and exciting opportunity to span the subject matter and methods divide. Realizing this opportunity will take a great deal of work, longterm commitments, and lots of goodwill. But if the last century of failed unilateral reforms teaches us anything, it is that both sides need each other and that even the widest street in the educational world can be bridged if colleagues on both sides agree to meet each other halfway.

Endnotes

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- 2. Diane Ravitch, Left Back: A Century of Failed School Reforms (New York: Simon and Schuster, 2000), 162-201
- 3. Simona Goldin, "Studenting: An Historical and Sociological Study" (PhD diss., University of Michigan, 2010), 24-80; and Paul G. Perrault, "The Evolution of Teacher Certification and the Qualifications to Teach in Four States, 1890-1930" (PhD diss., University of
- 4. Geraldine Joncich Clifford and James W. Guthrie, Ed School: A Brief for Professional Education (Chicago: University of Chicago Press, 1988)
- 5. Marc A. VanOverbeke, The Standardization of American Schooling: Linking Secondary and Higher Education, 1870–1910 (New York: Palgrave Macmillan, 2008)
- 6. Stephen Mucher, "Subject Matter and Method in the Preparation of High School Teachers: Pedagogy and Teacher Education at the University of Michigan, 1871-1921" (PhD diss., University of Michigan, 2003).
- 7. Mucher, "Subject Matter and Method," 105-135.
- 8. Robert Bullough cogently argues that some prominent teacher educators were still arguing for this approach in the early decades of the 20th century. Robert V. Bullough, Jr., "Pedagogical Content Knowledge circa 1907 and 1987: A Study in the History of an Idea," Teaching and Teacher Education 17, no. 6 (2001): 655-666

- 9. Mucher, "Subject Matter and Method," 200, 213-244.
- 10. David L. Angus, Professionalism and the Public Good: A Brief History of Teacher Certification (Washington, DC: Thomas B. Fordham Foundation, 2001), 17
- 11. During the 19th century and well into the 20th century, local school boards or county educational leaders often certified teachers after candidates for certification passed examinations on the subjects they were going to teach. Angus, Professionalism and the Public Good, 3-12; and Perrault, "The Evolution of Teacher Certification.
 - 12. To make matters worse, "one study in 1933-34 reported that only 29.74 percent of all high school teachers in Kansas were teaching in their major, and in the smaller schools, the figure was only about 6 percent." Angus, Professionalism and the Public Good, 18.
 - 13. Ravitch, Left Back, 162-201; and David F. Labaree, The Trouble with Ed Schools (New Haven, CT: Yale University Press, 2004), 129-169. On the continuing influence of "progressive" educational ideas on schools and colleges of education faculty, see Steve Farkas and Jean Johnson, Different Drummers: How Teachers of Teachers View Public Education (New York: Public Agenda, 1997).
 - 14. Lawrence A. Cremin, The Transformation of the School: Progressivism in American Education, 1876–1957 (New York: Alfred Knopf, 1961), 3–8.
 - 15. John Dewey, "The Child and the Curriculum" (Chicago: University of Chicago Press, 1902), 24
 - 16. Dewey. "The Child and the Curriculum." 22.
 - 17 Ravitch Left Back 162-198
- 18 Jeffrey F. Mirel. Patriotic Pluralism: Americanization Education and European Immigrants (Cambridge, MA: Harvard University Press, 2010): 52-54; and Anne-Lise Halvorsen, "Back to the Future: The Expanding Communities Curriculum in Geography Education," Social Studies 100, no. 3 (May-June 2009), 115-120.
- 19. Anne-Lise Halvorsen, "The Origins and Rise of Elementary Social Studies Education, 1884 to 1941" (PhD diss., University of Michigan, 2006), 293-362; and Jared R. Stallones, Paul Robert Hanna: A Life of Expanding Communities (Stanford, CA: Hoover Institution
- 20. Diane Ravitch, "Tot Sociology; Or What Happened to History in the Grade Schools," American Scholar 56, no. 3 (Summer 1987): 343-354.
- 21. Halvorsen, "Elementary Social Studies Education," 317, 321.
- 22. Halvorsen, "Elementary Social Studies Education," 317–319; and Ravitch, Left Back, 156–158. There was no reliable research to prove whether these topics and activities really engaged elementary pupils.
- 23. Stallones, Paul Robert Hanna, 168.
- 24. Stallones. Paul Robert Hanna. 3
- 25. Halvorsen, "Elementary Social Studies Education," 317.
- 26. David K. Cohen, "Learning to Teach Nothing in Particular: A Uniquely American Educational Dilemma," American Educator 34, no. 4 (Winter 2010-2011): 44-45, www.aft. org/pdfs/americaneducator/winter1011/Cohen.pdf.
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- 28. Smith. And Madly Teach. 21, 23, 62-82
- 29. Peter B. Dow, Schoolhouse Politics: Lessons from the Sputnik Era (Cambridge, MA: Harvard University Press, 1991), 72, 79-80
- 30. Dow, Schoolhouse Politics, 72-177. The focus on the Bushmen and the Netsilik was a deliberate break with the curricula promoted by Paul Hanna. Rather than beginning with "the familiar surroundings of home and neighborhood," MACOS rested on the belief that elementary students could be more engaged by studying things that were mysterious and new. Dow. Schoolhouse Politics, 80.
- 31. Dow, Schoolhouse Politics, 179. On other right-wing attacks on MACOS, see 185–228.
- 32. On the lack of change in high school course taking after NDEA and the growth of "general" science and math courses rather than such courses as chemistry and calculus, see David L. Angus and Jeffrey E. Mirel, The Failed Promise of the American High School, 1890-1995 (New York: Teachers College Press, 1999), 116-120.
- 33. Dow, Schoolhouse Politics, 263–264. Robert Church and Michael Sedlak, Education in the United States (New York: The Free Press, 1976), 414-417
- 34. National Commission on Excellence in Education, A Nation at Risk (Washington, DC: U.S. Government Printing Office, 1983), 22.
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- 36. Suzanne M. Wilson, Lee S. Shulman, and Anna E. Richert, "'150 Different Ways' of Knowing: Representations of Knowledge in Teaching," in Exploring Teachers' Thinking, ed. James Calderhead (Sussex, UK: Holt, Rinehart, and Winston, 1987), 104-124; Bullough "Pedagogical Content Knowledge"; and Labaree, The Trouble with Ed Schools, 163-166.
- 37. Wilson, Shulman, and Richert, "'150 Different Ways' of Knowing," 112
- 38. They include such scholars as Robert Bain, Deborah Loewenberg Ball, David K. Cohen, Pam Grossman, Magdalene Lampert, Annemarie Palincsar, Lee Shulman, Suzanne Wilson, and Sam Wineburg
- 39. Cohen, "Learning to Teach Nothing in Particular."
- 40. E. D. Hirsch, Jr., The Making of Americans: Democracy and Our Schools (New Haven, CT: Yale University Press, 2009)